

Date: 01/01/2016

التاريخ: 2016/01/01

Service Agreement includes PPM & Emergency Calls

اتفاقية خدمة شاملة الصيانة الدورية والزيارات الطارئة

First Party: Magrabi Hospital K3 .

الطرف الأول : مستشفى مغربي للعيون والأذن .

Second Party: Al-Amin medical Instruments Co. Ltd.

الطرف الثاني : شركة الأمين للتجهيزات الطبية والعلمية

Country: Kingdom of Saudi Arabia - City: Jeddah

الدولة المملكة العربية السعودية - المدينة: جدة

Telephone: 966-12-6601149

هاتف: 966-12-6601149

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فاكس: 966-12-6601146

With the help of Allah, the two parties have agreed on a maintenance contract for medical equipment on the following terms:

انه وبإذن الله تعالى اتفق الطرفان على عقد الصيانة للمعدات الطبية الموضحة ادناه و ذلك طبقاً للشروط الآتية:

1. Description of work and equipment:

- The Second Party undertakes to carry out all basic maintenance works (Provided that the equipment is in 100% good operational condition before Implementation of contract). This Contract covers unlimited emergency calls .(Spare parts are excluded)

1. وصف العمل والمعدات:-

- يتعهد الطرف الثاني بالقيام بكافة اعمال الصيانة الأساسية (بشرط أن تكون الأجهزة بحالة تشغيلية 100% قبل تنفيذ هذه الاتفاقية) التي تشمل أجور العمالة للصيانة الدورية وعدد غير محدود من الزيارات الطارئة (ولا تتضمن قطع الغيار)

Accessories and consumables are not included in any type of our service Agreements.

علمابان الاكسسوارات و المستهلكات غير مشمولة بأي نوع من عقود صيانتنا.

- Location:
Jeddah ,Makkah – K.S.A
- Equipment covered by contract:
Listed on Supplement ' A '

الموقع:
جدة - المملكة العربية السعودية

المعدات موضوع العقد:
متضمنة في ملحق أ

2. Contract term: Qty "1" Gregorian year
Starts on: 01/01/2016
Ends on: 31/12/2016

2- مدة العقد:- عدد "1" عام ميلادي
تبدأ في : 2016/01/01 م
تنتهي في : 2016/12/31 م

3- # of Visits: "2" visits / Year

3- عدد الزيارات : "2" زيارة سنويا

4. Contract amount: 425.000 Saudi riyals

4- قيمة العقد: 425.000 ريال سعودي

5. Payment method:
Half the value of the contract upon sign the contract.
Half the value of the contract after six months in 01/06/2016

5- نظام الدفع:-
نصف قيمة العقد عند توقيع العقد
نصف قيمة العقد بعد ستة أشهر في 2016/06/01.

6. Preventive maintenance
The Second Party shall undertake all preventive, remedial maintenance and calibration for equipment mentioned above as per the PPM schedule in supplement "A" in accordance with manufacturer's recommendations as per attached check list In supplement "B" using qualified Engineers and Technicians of the best quality and experience.

6- الصيانة الوقائية :-
يقوم الطرف الثاني باجراء جميع اعمال الصيانة الوقائية و التصحيحية و المعايرة للجهاز المذكور اعلاه وذلك حسب المواعيد المذكورة بالملحق "A" ، وطبقاً للتوصيات الخاصة بالشركات المصنعة كما هو موضح بالملحق "B" ، و بأعلى أداء و بواسطة مهندسين وفنيين على مستوى عالي من الكفاءة و الخبرة.

7. Second Party shall guarantee level of rendered maintenance as follows:

Company engineer to respond to maintenance request within 48 work hours, latest effective receipt of request by Fax or e-mail from the customer's authorized officer.
Maintenance that does not require spare parts, or in case spare parts are available within the Kingdom, company shall guarantee completion of the required repair within 96 work hours or less from receipt of maintenance request from the authorized officer of the customer.

7- يضمن الطرف الثاني مستوى الصيانة المقدم كما يلي :-
سيقوم مهندس الشركة بالاستجابة لأي طلب صيانة خلال مدة أقصاها 48 ساعة عمل من استلام طلب صيانة سواء بالفاكس او بالايمل من الشخص المخول بطلب الصيانة من المستشفى.
بالنسبة للصيانة التي لا تحتاج إلى قطع غيار او في حالة توفر قطع الغيار المطلوبة في المملكة فإن الشركة تضمن اكمال الاصلاح المطلوب خلال 96 ساعة عمل او اقل من استلام طلب صيانة سواء بالفاكس او بالايمل من الشخص المخول بطلب الصيانة من الطرف الأول

- For repairs that require spare parts not available in Kingdom, the company guarantees completion of repair within 8 workweeks from receipt of maintenance request by Fax or e-mail from the authorized officer of the customer.

Company undertakes to provide highly qualified trained engineers for equipment covered by this contract and sold by the Company to First Party.

8. Fault reporting system

First Party shall notify the Second Party of faults by Fax, E-mail or on phone, to the maintenance department of the company. Reports shall indicate the type and date of fault. Faults shall be reported during company work hours from 08:30AM to 01:30PM and from 02:30PM to 07:00 PM Exception of this will be Fridays, Saturdays and official holidays.

- Call Center No. : 920026426 .

9. Spare parts

The Second Party shall supply the spare parts required by the first party for repair of equipment included in this contract, based on a report to be submitted by the engineer of the Second Party and a quotation to be accepted by the First Party

10. Maintenance service

The Second Party shall provide the maintenance services of the equipment mentioned in this contract. Such services shall be provided during regular work hours during weekdays from Sunday to Thursday : from 08:30AM to 01:30PM and from 02:30PM to 07:00 PM

Maintenance services provided by the company shall cover the following:

1. Undertaking scheduled service inspections as specified by the manufacturer, provided that such inspections are performed as previously contained in agreement, including lubrication, cleaning, equipment function inspection, current leak inspection, setting and calibration of equipment. Inspection timing shall be agreed in advance in such a way as to provide company technicians' full access to the equipment listed in contract to undertake such inspections. In case company officials are denied such access to equipment, inspection work shall be suspended.

Exceptions:

This agreement shall not cover maintenance and repair services resulting from causes beyond the control of the company, such as the acts of God, acts of civil and military authorities, fires, civil commotion, floods, epidemics, health and quarantine restrictions, wars, rebellion, transport problems, power supply faults, air-condition faults as well as reasons beyond the control of the company related to supply of manpower, supply of material, manufacturing facilities. In case repairs, setting works, spare parts or maintenance works are required due to the foregoing reasons or due to acts of negligence, default or mistakes by customer or agents thereof.

Variations in costs:

Company is entitled to change costs of maintenance works included in agreement upon completion of contract term or for any following year. Such change shall be notified to customer within (30) days of occurrence thereof. Upon receipt of such notice the customer may terminate the services of the company through a notice to that effect before the effective date of such change. However, in the event the customer fails to terminate the service of the company, the new costs

- بالنسبة للإصلاح الذي يحتاج إلى قطع غيار غير متوفرة داخل المملكة فإن الشركة تضمن الإصلاح خلال 8 أسابيع عمل أو أقل من استلام طلب صيانة سواء بالفاكس أو بالإيميل من الشخص المخول بطلب الصيانة من المستشفى .

تضمن الشركة توفير مهندسين وفنيين مدربين بشكل ممتاز على الأجهزة موضوع العقد والمباعة من الشركة إلى الطرف الأول .

8- نظام تلقي بلاغات الأعطال :-

يقوم الطرف الأول بإبلاغ الطرف الثاني بالأعطال وذلك بواسطة رسالة فاكس أو إيميل وإذا تعذر ذلك يكون البلاغ تليفونيا لقسم الصيانة بالشركة علي أن يوضح خلال اتصال العطل الموجود بالجهاز و تاريخ العطل وذلك خلال ساعات العمل اليومي من الساعة الثامنة والنصف صباحا وحتى الواحدة والنصف ظهرا ومن الساعة الثانية والنصف عصرا وحتى الساعة السابعة مساء عدا يومي الجمعة والسبت من كل أسبوع والعطلات الرسمية

- رقم خدمة العملاء : 920026426 .

9- قطع الغيار:-

يقوم الطرف الثاني بتوفير قطع الغيار التي يحتاجها الطرف الأول لإصلاح الأجهزة موضوع العقد بناء على تقرير صيانة و عرض أسعار يرفعه مهندس الطرف الثاني و يقبله الطرف الأول

10- خدمات الصيانة:-

سيقوم الطرف الثاني بتوفير خدمات الصيانة المحددة في الاتفاقية للمعدات والأجهزة موضوع العقد و سيتم تقديم هذه الخدمة خلال فترة العمل النهارية العادية خلال الأسبوع المكون من خمسة أيام من الأحد إلى الخميس من الساعة الثامنة والنصف صباحا وحتى الواحدة والنصف ظهرا و من الساعة الثانية والنصف عصرا وحتى الساعة السابعة مساء وهي أوقات العمل الرسمية و تشمل خدمات الصيانة المقدمة من الشركة ما يلي:-

1- القيام بفحوصات خدمات الصيانة المجدولة كما هو محدد من قبل الشركة المصنعة حيث يتم إنجازها حسب الجدول الوارد سابقا في الاتفاقية و تشمل هذه الفحوصات أعمال التشحيم و النظافة و فحوصات وظائف المعدات و فحوصات تسريب التيار و أعمال الضبط و المعايرة و يتم الاتفاق على مواعيد الفحص مسبقا حيث يمنح موظفو الشركة كامل الحرية للوصول إلى المعدات موضوع العقد للقيام بأعمال الفحص و ستتوقف أعمال الفحص إذا لم يتمكن موظفو الشركة من الوصول إلى المعدات والأجهزة.

استثناءات:-

لا تشمل هذه الاتفاقية تقديم أعمال الصيانة والإصلاح إذا كان العطل ناتج عن أسباب خارجة عن نطاق قدرة و سيطرة الشركة مثل أمور القضاء و القدر و الأعمال الناتجة عن إقفل السلطات المدنية والعسكرية و الحروب الأهلية و الحرائق , الأضطرابات , الفيضانات, الأمراض , قيود الحجر الصحي , الحروب , أعمال الشغب ومشاكل النقل وأعطال في الكهرباء أو عدم الانتظام في تزويدها وأعطال أنظمة التكييف أو أسباب خارجة عن نطاق قدرة الشركة بتوفير العمالة و المواد أو تسهيلات التصنيع و إذا تطلب الأمر إجراء تصليحات أو أي أعمال ضبط أو استبدال القطع أو توفير الصيانة وذلك نتيجة أي من الأسباب الأتفة الذكر أو بسبب إهمال أو تقصير العميل أو نتيجة لارتكاب أي أعمال خاطئة من قبل العميل أو وكلائه .

التغير في التكاليف

لشركة الحق في تغيير تكاليف أعمال الصيانة الواردة في هذه الاتفاقية بعد انتهاء مدة العقد من هذه الاتفاقية أو في أي سنة تالية و ذلك باعطاء العميل إشعار خطي قبل (30) يوما من أحداث ذلك التغيير و للعميل الحق في إنهاء الاتفاقية عند استلام ذلك الإشعار عن طريق إخطار الشركة بذلك قبل تاريخ سريان التغيير و إذا أخفق العميل باعطاء إشعار بإلغاء خدمات الشركة فإن تكاليف الصيانة الجديدة تصبح سارية ابتداء من التاريخ المحدد في إشعار الشركة للعميل.

shall be valid effective the date specified by the company on the notice to the customer.

In the event the customer makes any adjustments, changes or additions in equipment included in this agreement, which changes the company deems either to make change in services rendered by the company under this agreement, or affect the performance of the equipment, and then company shall be entitled to terminate this agreement or increase the costs/ rates included hereunder. In case the costs sustained by the company under this agreement should increase after the date of effectiveness due to any change in the law, action or due to internal decrees issued or put in operation after the effective date of this agreement, such extra/ additional costs shall be added to the costs specified in agreement.

Any other conditions of this agreement, including the term thereof, which may be affected by such changes, shall be appropriately amended within any law, jurisdiction or otherwise. In case a petition is submitted to a receiver, bankruptcy or violation to any of the terms of the agreement by the customer, which violation is not duly remedied, then the company is entitled, on own discretion, to declare the customer in default, and accordingly take the following measures:

1. To declare that all amounts are due and payable under the agreement.
2. File claim for application of agreement terms or recover damage due to violation of agreement.

Limits of liabilities and obligations

The company shall in no way be liable for any damage to first party or his patients because of the equipment, whether such damages are special, contingent or partial, due to violation of contract, security or tort (including default, debts and obligations), including the following without limitation: loss of equipment use or any other related equipment, damage of equipment related to basic equipment, loss of capital costs, value of alternative products, facilities, services, power as well as costs of temporary stoppage of equipment and any claims by the customer for such damage.

In the event company provides any consultation or assistance to customer in relation to any equipment covered by the agreement, while such consultation and assistance is not included in agreement, or in case such consultation or assistance is related to equipment not referred to in this agreement, then this consultation or assistance shall not involve the company in any responsibility whether in contract, security or in cause of damage of injury (including negligence, debts and obligations).

Covering of information:

The information, proposals and ideas conveyed from customer to company in relation to performance of services under this contract shall not be considered as secrets or confidential unless expressly proved in writing upon approval of the official representative of the company.

General note

This agreement is considered to be the complete and exclusive statement between the parties and therefore supersedes all prior or concurrent proposals or communications regarding the agreement or any other business not included hereunder shall not be binding on parties. Any assignment, change or amendment in conditions contained herein shall not be binding on company unless rendered in writing and signed by the duly authorized representative of the parties.

The validity of this agreement, its implementation as well as all other matters related thereto, including amendment thereon, shall all be

و في حالة استحداث العميل لأي تعديلات أو تغييرات أو إضافات على الأجهزة و المعدات التي تشملها هذه الاتفاقية و التي من شأنها في نظر الشركة أن تحدث تغيير
في الخدمات التي تقوم بها الشركة ضمن هذه الاتفاقية أو أن تؤثر على أداء الأجهزة و المعدات فيكون للشركة الحق في إنهاء هذه الاتفاقية أو تغيير التكاليف الواردة فيها. و في حالة زيادة التكاليف التي تتحملها الشركة حيال تنفيذ هذه الاتفاقية بعد تاريخ سريان مفعولها نتيجة إلى تغيير في القانون أو أي إجراء أو تنظيم أو نتيجة للمراسيم أو القوانين الداخلية التي تصدر أو يجري العمل بها بعد تاريخ ابتداء العمل في الاتفاقية فإنه يجري إضافة التكاليف الزائدة إلى التكاليف المحددة في الاتفاقية

ان أي شروط أخرى في هذه الاتفاقية بما في ذلك مدة العقد و التي يمكن أن تتأثر بمثل هذه التغييرات سيجري تعديلها بالشكل المناسب ضمن أي قانون أو تشريع أو غيره. في حال تقديم العميل عريضة لحارس قضائي أو في حالة الإفلاس أو في حالة نقض العميل أي شرط من شروط الاتفاقية و لم يتم معالجة هذا النقص. فإن للشركة الحق حسب اختيارها أن تعلن أن العميل مهممل و مقصر و لها الحق في اتخاذ أي من الخطوات التالية:

- 1- إعلان كافة مبالغ الاتفاقية المستحقة واجبة الدفع.
- 2- إقامة دعوى لتطبيق بنود الاتفاقية أو لاسترداد ما حصل من أضرار نتيجة لنقض الاتفاقية

حدود المسئوليات والالتزامات

لن تكون الشركة مسئولة في أي حال من الأحوال عن أي أضرار يتعرض لها الطرف الأول أو ممرض بسبب الأجهزة سواء كانت تلك الأضرار خاصة أو عارضة أو جزئية ناتجة عن مخالفة للعقد أو الكفالة أو أضرار متعمدة أو غير متعمدة (بما في ذلك التقصير أو الدين أو الالتزامات) لها في ذلك على سبيل المثال لا الحصر الخسارة في استعمال الأجهزة و المعدات أو أي معدات ذات علاقة و التلف في المعدات التي على علاقة بالمعدات الأساسية و كلفة راس المال و ثمن المنتجات البديلة و المرافق و الخدمات أو الطاقة البديلة و التكاليف الناتجة عن التوقف المؤقت للأجهزة أو أي مطالب أخرى من جانب العميل عن هذه الأضرار

و في حالة تقديم الشركة للمشورة و المساعدة للعميل فيما يتعلق بأي أجهزة واردة في الاتفاقية دون أن تكون هذه المساعدة أو المشورة مشمولة بهذه الاتفاقية أو إذا كانت هذه المساعدة تتعلق بأجهزة لم يشار إليها في هذه الاتفاقية. فإن تقديم هذه المشورة و المساعدة لن يحمل الشركة أي مسؤولية سواء كان ذلك في العقد أو الكفالة أو في حالة الضرر و التلف (بما في ذلك الإهمال أو الدين أو الالتزامات) أو غير ذلك.

الإفصاح عن المعلومات

لن يتم اعتبار أي من المعلومات أو اقتراحات أو أي أفكار تنتقل من العميل إلى الشركة بخصوص تنفيذ الخدمات ضمن الاتفاقية بمثابة أسرار و لن يتم رفعها إلى الشركة بطريقة سرية ما لم يثبت ذلك و بطريقة خطية وبموافقة ممثل الشركة الرسمي.

ملاحظة عامة

تعتبر هذه الاتفاقية بمثابة التنظيم الكامل والوحيد للعلاقة بين الطرفين ويكون لها الغلبة على أي وثيقة أو عرض أو مراسلات أو أي وعود أو شروط سابقة لتاريخ هذه الاتفاقية والتي تبقى جميعها غير ملزمة لأي من الطرفين وإن أي تنازل أو تغيير أو تعديل لأي من الشروط الواردة ضمن الاتفاقية لا يعتبر ملزم للشركة ما لم يكن خطياً و موقعاً نيابة عن الشركة من جانب احد ممثليها المعتمدين و المفوضين بذلك.

إن سريان مفعول الاتفاقية و تنفيذها وكافة المسائل المتعلقة بها وكذلك أي تعديلات تجري عليها ستكون خاضعة لقوانين المملكة العربية السعودية.

subject to the Laws of the Kingdom of Saudi Arabia.

The demands for service or any part thereof under this contract, which are in satisfaction and performance and not as a further security or obligation of the company, its affiliates, the manufacturer of the complete equipment or any part thereof, shall be in writing before or at the time or providing the service. Failure to notify the company to that effect shall be deemed as a waiver for any similar demands.

The total or partial non validity of an article or a paragraph of this agreement shall not affect the validity or correctness of the remaining articles or paragraphs of the agreement. Any deletion, addition or change in this agreement or any supplement thereof shall promptly render the same as null and void.

This agreement is subject to all related laws and regulations prevailing in the Kingdom of Saudi Arabia.

This contract has been issued in 4 pages, Supplements A and B. each party maintains one signed and stamped copy.

إن تنفيذ الخدمات في ظل هذه الاتفاقية تعتبر إرضاء و تلبية لطلبات العميل ولا يجوز اعتبارها كفاية أو التزام آخر من الشركة أو الشركات التابعة لها أو من مصنع الأجهزة يجب أن تكون طلبات الخدمة خطية قبل أو في الوقت الذي يتم طلب الخدمة فيه. وأن عدم إبلاغ الشركة بذلك يعتبر تنازلاً عن طلب الخدمة. إن عدم سريان المفعول الكلي أو الجزئي لأي مادة أو فقرة في هذه الاتفاقية لن يؤثر على سريان و صحة ما تبقى من مثل تلك المواد أو الفقرات الواردة في هذه الاتفاقية. أي حذف أو إضافة أو تغيير في هذه الاتفاقية أو أي من ملحقاتها يؤدي إلى إلغاء هذه الاتفاقية فوراً

ينطبق على هذه الاتفاقية القوانين والأنظمة ذات العلاقة المعمول بها في المملكة العربية السعودية

حرر هذا العقد في 4 صفحات والملاحق (أ) و(ب) . ومن نسختين أصليتين يحتفظ كل طرف بنسخة موقعة ومختومة.

Success if from Allah

والله ولي التوفيق .

First Party:

Signature:

Stamp:

[Handwritten Signature]



الطرف الأول:

التوقيع:

الختم:

Second Party: Al-Amin Medical Instruments Co. Ltd.

Signature:

Stamp:

الطرف الثاني: شركة الأمين للتجهيزات الطبية

for *[Handwritten Signature]*

التوقيع:

الختم:



MEDICAL EQUIPMENT SUPJECTED TO CONTRACT

Supplement A
JEDDAH HOSPITAL K3

Sr.	Equipment	Serial No.	Model	Manufacturer	Location	Dept.	Maintenance Schedule	
							First PPM	Second PPM
1	Applanation	23946	AT 900	Haag Steit	A-0034	OPD	25-May-16	15-Nov-16
2	Applanation	NA	NA	BERN	A-0032	Refractive	25-May-16	15-Nov-16
3	Calibration Unit	560010		Nidek	A-018	OR-LASER	25-May-16	15-Nov-16
4	HEINE Charger	1011007612	NT 300	Heine	A-0034	Refractive	25-May-16	15-Nov-16
5	EyeCap	Ver. 7.5.28		EYECAP	A-0032	Refractive	25-May-16	15-Nov-16
6	Imaging Module	Ver.	IM 900	Haag Steit	A-0034	Refractive	25-May-16	15-Nov-16
7	Indirect Ophthalmoscope	22376	Omega 100	Heine	A-0034	Refractive	25-May-16	15-Nov-16
8	Indirect Ophthalmoscope	1933	Omega 100	HEINE	A-0032	Refractive	25-May-16	15-Nov-16
9	Lensmeter	22331		Nidek	A-018	OR-LASER	25-May-16	15-Nov-16
10	Imaging Light Source	356	CLS01	Haag Steit	A-0034	Refractive	25-May-16	15-Nov-16
11	Imaging Light Source	467	CLS01	Haag Steit	A-0032	Refractive	25-May-16	15-Nov-16
12	Moria Evolution	4325	EV.3	Moria	A-018	OR-LASER	15-May-16	13-Nov-16
13	Ophthalmic Unit	368	S. Executive	Frastema	A-0032	Refractive	25-May-16	15-Nov-16
14	Ophthalmoscope	NA	BETA200	Heine	A-0034	Refractive	25-May-16	15-Nov-16
15	Ophthalmic Camera		DFW-X700	SONY	A-0032	Refractive	25-May-16	15-Nov-16
16	Ophthalmic Unit	367	S. Executive	Frastema	A-0034	Refractive	25-May-16	15-Nov-16
17	Ophthalmoscope		BETA200	HEINE	A-0032	Refractive	25-May-16	15-Nov-16
18	Pachymeter	643	Pachette	DGH	A-0034	Refractive	25-May-16	15-Nov-16
19	Pachymeter	2493	Pachette 2	DGH	A-0032	Refractive	25-May-16	15-Nov-16
20	Pachymeter	41321	Corno-gage	Sonogage	A-018	OR-LASER	25-May-16	15-Nov-16
21	Pachymeter Probe	12061439		Sonogage	A-018	OR-LASER	25-May-16	15-Nov-16
22	Patient Surgical Bed	6108		Akrus	A-018	OR-LASER	25-May-16	15-Nov-16
23	Patient Surgical Bed	92608-24	MK80/XYZ	Dexta	A-018	OR-LASER	25-May-16	15-Nov-16
24	Physician Stool	E092603-16	905	Dexta	A-018	OR-LASER	25-May-16	15-Nov-16
25	Physician Stool	F062599-81	905	Dexta	A-018	OR-LASER	25-May-16	15-Nov-16
26	Chart Projector	760909	CP-690	Nidek	A-0034	Refractive	25-May-16	15-Nov-16
27	Chart Projector	171	CP-30	Takagi	A-0032	Refractive	25-May-16	15-Nov-16
28	Refractor	23617	RT-600	Nidek	A-0034	Refractive	25-May-16	15-Nov-16
29	Refractor	20238	RT-600	Nidek	A-0032	Refractive	25-May-16	15-Nov-16
30	Refinoscope	NA	BETA200	Heine	A-0034	Refractive	25-May-16	15-Nov-16
31	Slit Lamp	9791	BQ-900	Haag Steit	A-0034	Refractive	25-May-16	15-Nov-16
32	Slit Lamp	7570	Bm 900	Haag Steit	A-0032	Refractive	25-May-16	15-Nov-16
33	Ophthalmic Examination Unit	5043	U-800	Frastema	B-022	IP	25-May-16	15-Nov-16
34	Slit Lamp	49209	B-900	Haag Steit	B-022	IP	25-May-16	15-Nov-16
35	Head Light	17912	Omega 100	Heine	B-022	IP	25-May-16	15-Nov-16
36	Patient Examination Chair	NA	NA	Frastema	B-022	IP	25-May-16	15-Nov-16
37	Slit Lamp	20815	SL-450	Haag Steit	A-0026	Refina	10-May-16	8-Nov-16
38	Ophthalmic Examination Unit	1712	Delta	Frastema	A-0026	Refina	10-May-16	8-Nov-16
39	Patient Examination Chair		CP-670	Nidek	A-0026	Refina	10-May-16	8-Nov-16
40	Chart Projector	261199	1951-P-2276	Keeler	A-0026	Refina	10-May-16	8-Nov-16
41	Indirect Ophthalmoscope	29292	BQ-900	Haag Steit	A-0027	Refina	10-May-16	8-Nov-16
42	Slit Lamp	1400217-1114						

43	Chart Projector	263229	CP-670	Nidek	A-0027	Refina	10-May-16	8-Nov-16
44	Camera	403324	DXC-390P	Sony	A-0027	Refina	10-May-16	8-Nov-16
45	Indirect Ophthalmoscope	120005417	HC 50	Heine	A-0027	Refina	10-May-16	8-Nov-16
46	Ophthalmic Examination Unit	1282	S. Executive	Frastema	A-0027	Refina	10-May-16	8-Nov-16
47	Slit Lamp	7070037	SL-990	Haag Steit	A-0028	Refina	10-May-16	8-Nov-16
48	Chart Projector	85245	CP-205	Takagi	A-0028	Refina	10-May-16	8-Nov-16
49	Retinoscope	NA	18200	WeichAllyn	A-0028	Refina	10-May-16	8-Nov-16
50	Ophthalmoscope	NA	11710	WeichAllyn	A-0028	Refina	10-May-16	8-Nov-16
51	Ophthalmic Examination Unit	3205	Simplex	Frastema	A-0028	Refina	10-May-16	8-Nov-16
52	Multi-Color Laser	50152	MC-500	Nidek	A-0029	Refina	10-May-16	8-Nov-16
53	Chart Projector	163067	CP-770	Nidek	A-0029	Refina	10-May-16	8-Nov-16
54	Retinoscope	NA	LAMBADA 100	Heine	A-0029	Refina	10-May-16	8-Nov-16
55	Indirect Ophthalmoscope	NA	Omega 100	Heine	A-0029	Refina	10-May-16	8-Nov-16
56	Autorefractor/Keratometer	331093	ARK-510A	Nidek	A-0020	Ophtha.	10-May-16	8-Nov-16
57	Autorefractor/Keratometer	333923	ARK-510A	Nidek	A-00(102)	Ophtha.	10-May-16	8-Nov-16
58	AutoLensmeter	500722	LM 600 P	Nidek	A-00(102)	Ophtha.	10-May-16	8-Nov-16
59	Ophthalmic Examination Unit	1591	Delta	Frastema	A-00(103)	Ophtha.	10-May-16	8-Nov-16
60	Slit Lamp	90047449	BM 900	Haag Steit	A-00(103)	Ophtha.	10-May-16	8-Nov-16
61	Applanation Tonometer	900.42.120357	BM 900	Haag Steit	A-00(103)	Ophtha.	10-May-16	8-Nov-16
62	Biometer	90047449	BM 900	Haag Steit	A-00(103)	Ophtha.	10-May-16	8-Nov-16
63	Chart Projector	264392	CP-6	CP-670	A-00(103)	Ophtha.	10-May-16	8-Nov-16
64	Indirect Ophthalmoscope	5.189.449	Omega 100	Heine	A-00(103)	Ophtha.	10-May-16	8-Nov-16
65	Retinoscope	4.526.449	18200	WeichAllyn	A-00(103)	Ophtha.	10-May-16	8-Nov-16
66	Ophthalmoscope	NA	Delta	Frastema	A-00(104)	Ophtha.	12-May-16	10-Nov-16
67	Ophthalmic Examination Unit	900.21.67446	BM 900	Haag Steit	A00(104)	Ophtha.	12-May-16	10-Nov-16
68	Slit Lamp	900.42.138674	BM 900	Haag Steit	A00(104)	Ophtha.	12-May-16	10-Nov-16
69	Applanation Tonometer	103548	Omega 100	Heine	A00(104)	Ophtha.	12-May-16	10-Nov-16
70	Indirect Ophthalmoscope	11152	RT-500	Magnon	A00(104)	Ophtha.	12-May-16	10-Nov-16
71	Refractor	220563	ISCP-660	NIDEK	A00(104)	Ophtha.	12-May-16	10-Nov-16
72	Chart Projector	5.859.687	BETA200	Heine	A00(104)	Ophtha.	12-May-16	10-Nov-16
73	Retinoscope	NA	BETA200	Heine	A00(104)	Ophtha.	12-May-16	10-Nov-16
74	Ophthalmoscope	NA	NT-200	Heine	A00(104)	Ophtha.	12-May-16	10-Nov-16
75	R/O Charger	900.3.1.54158	BM 900	Haag Steit	A00(104)	Ophtha.	12-May-16	10-Nov-16
76	Biometer	662	S. Executive	Frastema	A00(111)	Ophtha.	12-May-16	10-Nov-16
77	Ophthalmic Examination Unit	900.42.14286	BM 900	Haag Steit	A00(111)	Ophtha.	12-May-16	10-Nov-16
78	Slit Lamp	M 90042636	900	Haag Steit	A00(111)	Ophtha.	12-May-16	10-Nov-16
79	Applanation Tonometer	261143	CP-670	Nidek	A00(111)	Ophtha.	12-May-16	10-Nov-16
80	Biometer	27909	RT-600	Nidek	A00(111)	Ophtha.	12-May-16	10-Nov-16
81	Chart Projector	2/130	Omega 180	Heine	A00(111)	Ophtha.	12-May-16	10-Nov-16
82	Refractor	5.859.687	BETA200	Heine	A00(111)	Ophtha.	12-May-16	10-Nov-16
83	Indirect Ophthalmoscope	5542904	BETA200	Heine	A00(111)	Ophtha.	12-May-16	10-Nov-16
84	Retinoscope	1011007608	NT-300	Heine	A00(111)	Ophtha.	12-May-16	10-Nov-16
85	Ophthalmoscope	2010-3101	Pachette 2	DGH	A00(111)	Ophtha.	12-May-16	10-Nov-16
86	R/O Charger	NA	NA	Frastema	A00(111)	Ophtha.	12-May-16	10-Nov-16
87	Ultrasonic Pachymeter	NA	NA	Frastema	A00(111)	Ophtha.	12-May-16	10-Nov-16
88	Patient Examination Chair	NA	NA (OLD)	Frastema	A-0041	Refractive	12-May-16	10-Nov-16
89	Ophthalmic Examination Unit	NA	NA (OLD)	Frastema	A-0041	Refractive	12-May-16	10-Nov-16

90	Patient Examination Chair	NA	NA	Frastema	A-0041	Refractive	12-May-16	10-Nov-16
91	Slit Lamp	21495	SL-450	Nidek	A-0041	Refractive	12-May-16	10-Nov-16
92	Applanation Tonometer	14331	AT 900	Haag Steit	A-0041	Refractive	12-May-16	10-Nov-16
93	Keratometer	20773	OM-200	Magnon	A-0041	Refractive	12-May-16	10-Nov-16
94	Refractor	991130	VT-5	Takagi	A-0041	Refractive	12-May-16	10-Nov-16
95	Chart Projector	260764	CP-670	Nidek	A-0041	Refractive	12-May-16	10-Nov-16
96	Pachymeter	1950	DGH 500	DGH	A-0041	Refractive	12-May-16	10-Nov-16
97	Retinoscope	859.687	BETA200	Heine	A-0041	Refractive	12-May-16	10-Nov-16
98	Ophthalmoscope	4.963.014	BETA200	Heine	A-0041	Refractive	12-May-16	10-Nov-16
99	R/O Charger	NA	NT-200	Heine	A-0041	Refractive	12-May-16	10-Nov-16
100	Indirect Ophthalmoscope	17119	LM-30	Heine	A-0041	Refractive	12-May-16	10-Nov-16
101	Auto Lensmeter	12721	LM-990	Nidek	A-0035	Refractive	12-May-16	10-Nov-16
102	Ophthalmic Examination Unit	254	S. Executive	Frastema	A-0043	Refractive	12-May-16	10-Nov-16
103	Slit Lamp	NA	BM 900	Haag Steit	A-0043	Refractive	12-May-16	10-Nov-16
104	Applanation Tonometer	10902	AT 900	Haag Steit	A-0043	Refractive	12-May-16	10-Nov-16
105	Keratometer	95016223	NA	Haag Steit	A-0043	Refractive	12-May-16	10-Nov-16
106	Indirect Ophthalmoscope	21999	Omega 100	Heine	A-0043	Refractive	12-May-16	10-Nov-16
107	Chart Projector	240802	CP-670	Heine	A-0043	Refractive	12-May-16	10-Nov-16
108	Refractor	20906	RT-600	Nidek	A-0043	Refractive	12-May-16	10-Nov-16
109	Direct Ophthalmoscope	NA	11720	WelchAllyn	A-0043	Refractive	12-May-16	10-Nov-16
110	Retinoscope	NA	18200	WelchAllyn	A-0043	Refractive	12-May-16	10-Nov-16
111	R/O Charger	NA	7114	WelchAllyn	A-0043	Refractive	12-May-16	10-Nov-16
112	Patient Examination Chair	NA	NA	Frastema	A-0033	Refractive	12-May-16	10-Nov-16
113	Ophthalmic Examination Unit	NA	S. Executive	Frastema	A-0033	Refractive	12-May-16	10-Nov-16
114	Slit Lamp	601.1	22880	Haag Steit	A-0033	Refractive	12-May-16	10-Nov-16
115	Applanation Tonometer	23446	AT 900 BQ	Haag Steit	A-0033	Refractive	12-May-16	10-Nov-16
116	Refractor	23617	RT-900	Nidek	A-0033	Refractive	12-May-16	10-Nov-16
117	Chart Projector	690760909	CP-690	Nidek	A-0033	Refractive	12-May-16	10-Nov-16
118	Light Source	356	CLS-01	Haag Steit	A-0033	Refractive	12-May-16	10-Nov-16
119	Eye Suite	NA	IM 900	Haag Steit	A-0033	Refractive	12-May-16	10-Nov-16
120	Pachymeter	643	DGH 500	DGH	A-0033	Refractive	12-May-16	10-Nov-16
121	R/O Charger	1011007612	NT-300	Heine	A-0033	Refractive	12-May-16	10-Nov-16
122	Retinoscope	NA	BETA200	Heine	A-0033	Refractive	12-May-16	10-Nov-16
123	Ophthalmoscope	NA	BETA200	Heine	A-0033	Refractive	12-May-16	10-Nov-16
124	Indirect Ophthalmoscope	22376	Omega 100	Heine	A-0033	Refractive	12-May-16	10-Nov-16
125	Patient Examination Chair	NA	NA	Frastema	A-0032	Refractive	12-May-16	10-Nov-16
126	Retinoscope	NA	BETA200	Heine	A-0032	Refractive	12-May-16	10-Nov-16
127	Patient Examination Chair	NA	NA	Frastema	A-0032	Refractive	12-May-16	10-Nov-16
128	Portable Autorefractor	340526	ARK-30	Nidek	A-0114	Orthoptic	4-May-16	24-Nov-16
129	AutoRef Charger	140838	ARK-30	Nidek	A-0114	Orthoptic	4-May-16	24-Nov-16
130	Lensmeter	132186	LM 1000P	Nidek	A-0014	Orthoptic	4-May-16	24-Nov-16
131	Ophthalmic Examination Unit	20965	S. Executive	Frastema	A-0112	Orthoptic	4-May-16	24-Nov-16
132	Slit Lamp	900.201.62830	BM 900	Haag Steit	A-0112	Orthoptic	4-May-16	24-Nov-16
133	Portable Slit Lamp	510643	SL-15	Kowa	A-0112	Orthoptic	4-May-16	24-Nov-16
134	Portable SL Charger	520645	90 VA	Kowa	A-0112	Orthoptic	4-May-16	24-Nov-16
135	Indirect Ophthalmoscope	20965	Omega 100	Heine	A-0112	Orthoptic	4-May-16	24-Nov-16
136	Retinoscope	NA	BETA200	Heine	A-0112	Orthoptic	4-May-16	24-Nov-16

137	Slit Lamp	NA	BM 900	Haag Steit	A-0113	Orthoptic	4-May-16	24-Nov-16
138	Portable Autorefraction	340723	ARK-30	Nidek	A-0113	Orthoptic	4-May-16	24-Nov-16
139	Portable Slit Lamp	1508607189	SL-15	Kowa	A-0113	Orthoptic	4-May-16	24-Nov-16
140	Indirect Ophthalmoscope	J-003.31.231	Omega MD10	Heine	A-0113	Orthoptic	4-May-16	24-Nov-16
141	Visual Acuity	MSA82013501108	M & S	MSI	A-0113	Orthoptic	4-May-16	24-Nov-16
142	Retinoscope	NA	BETA200	Heine	A-0113	Orthoptic	4-May-16	24-Nov-16
143	Ophthalmic Examination Unit	NA	S. Executive	Frastema	A-0113	Orthoptic	4-May-16	24-Nov-16
144	Visual Acuity	NA	M & S	NIDEK	A-0115	Orthoptic	4-May-16	24-Nov-16
145	Chart Projector	6708	CP-660	NIDEK	A-0115	Orthoptic	4-May-16	24-Nov-16
146	Lensmeter	NA	LM-350	NIDEK	A-0115	Orthoptic	4-May-16	24-Nov-16
147	Amblyoscope	NA	NA	Clement Clark	A-0115	Orthoptic	4-May-16	24-Nov-16
148	ENT Examination Unit	86029810006	Reliance	Reliance	A-0111	ENT	4-May-16	24-Nov-16
149	Surgical Ceiling Microscope	2041	CY 1100-150	Moller Wedel	A-0111	ENT	4-May-16	24-Nov-16
150	Head Light	J-31.22	MD-1000	Heine	A-0111	ENT	4-May-16	24-Nov-16
151	Head Light	J-31.22	MD-1000	Heine	A-0111	ENT	4-May-16	24-Nov-16
152	Patient Examination Chair	NA	NA	Frastema	A-0111	ENT	4-May-16	24-Nov-16
153	Patient Examination Chair	460	88AD	Frastema	A-0144	ENT	4-May-16	24-Nov-16
154	Floor Stand Microscope	514	NA	Haag Steit	A-0144	ENT	4-May-16	24-Nov-16
155	Light Source	1/4721	HK 6000	Heine	A-0144	ENT	4-May-16	24-Nov-16
156	Cautery	915604922	09-156	Faromed	A-0144	ENT	4-May-16	24-Nov-16
157	Coagulator	10122-041	ICC 50 INT	Erbe	RM.6	OR	4-May-16	24-Nov-16
158	Unipolar Diathermy	444496	NA	Coagulasem	RM.6	OR	22-May-16	13-Nov-16
159	Drill Motor	2433403	ORL - E-92	Bien Air	RM.6	OR	22-May-16	13-Nov-16
160	Light Source	1/1/4161	HK 6000	Heine	RM.6	OR	22-May-16	13-Nov-16
161	Indirect Head Light	NA	NA	Heine	RM.6	OR	22-May-16	13-Nov-16
162	Laser Biotific Machine	2968G	E 30w/980nm	Ceram Optic GmbH	RM.6	OR	22-May-16	13-Nov-16
163	Microdrill	12 C 0018	Osseostap	Bien Air	RM.6	OR	22-May-16	13-Nov-16
164	Phaco Machine	0802215501X	Infiniti	ALCON	RM.3	OR	22-May-16	13-Nov-16
165	Cautery	1427	ICC 50 INT	Erbe	RM.3	OR	22-May-16	13-Nov-16
166	Katalye	1025	NA	Erbe	RM.3	OR	22-May-16	13-Nov-16
167	Indirect Ophthalmoscope	NA	Omega 100	Heine	RM.3	OR	22-May-16	13-Nov-16
168	Indirect Ophthalmoscope	25774	Laser	Nidek	RM.2	OR	22-May-16	13-Nov-16
169	Indirect Ophthalmoscope	6946	Laser	Nidek	RM.2	OR	22-May-16	13-Nov-16
170	Constellation	1202152901X	NA	Alcon	RM.2	OR	15-May-16	13-Nov-16
171	Diode Laser	33312	3300	Nidek	RM.2	OR	15-May-16	6-Nov-16
172	Phaco Machine	0701484201X	Infiniti	ALCON	RM.2	OR	22-May-16	13-Nov-16
173	Phaco Machine	802193801	Infiniti	ALCON	RM.4	OR	22-May-16	13-Nov-16
174	Light Source	NA	NA	Heine	RM.4	OR	15-May-16	6-Nov-16
175	Light Source	NA	H-600	Heine	RM.4	OR	15-May-16	6-Nov-16
176	ENT Examination Unit	NA	NA	Reliance	A-0110	ENT	15-May-16	6-Nov-16
177	Head Light	J-31.222	NA	Heine	A-0110	ENT	15-May-16	6-Nov-16
178	Patient Examination Chair	NA	NA	Frastema	A-0110	ENT	15-May-16	6-Nov-16
179	ENT Examination Unit	86020517021	NA	Reliance	A-0110	ENT	15-May-16	6-Nov-16
180	Head Light	J-31.222	mo 1000 #. 0	Heine	A-019	ENT	15-May-16	6-Nov-16
181	Suction Unit	1091129	Schuco-Vac	Schuco Inc.	A-019	ENT	15-May-16	6-Nov-16
182	Rigid Endoscope	10V28080631	Mega Net-280	MegaMedical Corp.	A-019	ENT	15-May-16	6-Nov-16
183	LCD Monitor	540030J400035	GLM - 150	NA	A-019	ENT	15-May-16	6-Nov-16

184	Negatoscope	10860	m608043	Titanox	A-019	ENT	15-May-16	6-Nov-16
185	Patient Examination Chair	312100 0115002D	Linak	Linak	A-019	ENT	15-May-16	6-Nov-16
186	Tympanometer	GS34565	GSI Typm.	GSI	A-01 (XX)	ENT	15-May-16	6-Nov-16
187	Audiometer	2000-0315	GSI 61	GSI	A-01 (XX)	ENT	15-May-16	6-Nov-16
188	Audio Booth	5057	RE-130	Booth	A-01 (XX)	ENT	15-May-16	6-Nov-16
189	Audiometer	GS0045734	GSI 61	GSI	A-01 139	ENT	15-May-16	6-Nov-16
190	Tympanometer	20030214	GSI Typm.	GSI	A-01 139	ENT	15-May-16	6-Nov-16
191	Examination uniu	203	65	frastema	B-ADM-002	ER	4-May-16	24-Nov-16
192	slit lamp	2100136	990	cso	B-ADM-002	ER	4-May-16	24-Nov-16
193	chart projector	760199	cp690	nidek	B-ADM-002	ER	4-May-16	24-Nov-16
194	head light		omega 180	heine	B-ADM-002	ER	4-May-16	24-Nov-16
195	phoropter		vi5	takagi	B-ADM-002	ER	4-May-16	24-Nov-16
196	portable slit lamp	1508704186	sl-15	kowa	B-ADM-002	ER	4-May-16	24-Nov-16
197	thermometer		ear type	braun	B-ADM-002	ER	4-May-16	24-Nov-16
198	ophthalmoscope			heine	B-ADM-002	ER	4-May-16	24-Nov-16
199	refinoscope			heine	B-ADM-002	ER	4-May-16	24-Nov-16
200	ENT unit			reliance	B-ADM-001	ER	4-May-16	24-Nov-16
201	suction machine	6,99E+11	1234	thomas	B-ADM-001	ER	4-May-16	24-Nov-16
202	examination chair	old			B-ADM-001	ER	4-May-16	24-Nov-16
203	Ophthalmic Examination Unit			Frastema	A00(105)	Ophtha.	9-May-16	24-Nov-16
204	Slit Lamp		900	Haag Steit	A00(105)	Ophtha.	9-May-16	24-Nov-16
205	Chart Projector	165374	CP 770	NIDEK	A00(105)	Ophtha.	9-May-16	24-Nov-16
206	Refractor	11152	500	MAGNON	A00(105)	Ophtha.	9-May-16	24-Nov-16
207	Indirect Ophthalmoscope	500	OMEGA 500	HEINE	A00(105)	Ophtha.	9-May-16	24-Nov-16
208	Ophthalmic Examination Unit		SUPER EXE.	Frastema	A00(109)	Ophtha.	9-May-16	24-Nov-16
209	EYE SUITE W/IM900 SL	9001367070	IM900	EYE SUITE	A00(109)	Ophtha.	9-May-16	24-Nov-16
210	Chart Projector	766955	CP690	NIDEK	A00(109)	Ophtha.	9-May-16	24-Nov-16
211	Ophthalmic Examination Unit		SUPER EXE.	Frastema	A00(110)	Ophtha.	9-May-16	24-Nov-16
212	Slit Lamp	7569	BQ-900	Haag Steit	A00(110)	Ophtha.	9-May-16	24-Nov-16
213	Indirect Ophthalmoscope		OMEGA 100	HEINE	A00(110)	Ophtha.	9-May-16	24-Nov-16
214	Refractor	21009	RT 600	NIDEK	A00(110)	Ophtha.	9-May-16	24-Nov-16
215	PROJECTOR	2026008	M & S	M & S	A00(110)	Ophtha.	9-May-16	24-Nov-16
216	Ophthalmic Examination Unit		DELTA	Frastema	A00(106)	Ophtha.	9-May-16	24-Nov-16
217	Slit Lamp	9905070	900	Haag Steit	A00(106)	Ophtha.	9-May-16	24-Nov-16
218	Chart Projector	791308	CP30	TAKAGI	A00(106)	Ophtha.	9-May-16	24-Nov-16
219	Refractor	21008	RT 600	NIDEK	A00(106)	Ophtha.	9-May-16	24-Nov-16
220	Indirect Ophthalmoscope		OMEGA 100	HEINE	A00(106)	Ophtha.	9-May-16	24-Nov-16
221	Retinoscope			HEINE	A00(106)	Ophtha.	9-May-16	24-Nov-16
222	SPACE SAVING CHART	360462	SSC 330	NIDEK	A00(108)	Ophtha.	9-May-16	24-Nov-16
223	Refractor	17682	RT 2100	NIDEK	A00(108)	Ophtha.	9-May-16	24-Nov-16
224	LENSOMETER	10255	LM750 C	MAGNON	A00(108)	Ophtha.	9-May-16	24-Nov-16
225	Ophthalmic Examination Unit		SIMPLEX	FRATEMA SIMPLEX	A00(108)	Ophtha.	9-May-16	24-Nov-16
226	Ophthalmic Examination Unit		SIMPLEX	FRATEMA SIMPLEX	A-OPD-0128	Ophtha.	17-May-16	17-Nov-16
227	Slit Lamp	98030124	SL-900	CSO	A-OPD-0128	Ophtha.	17-May-16	17-Nov-16
228	Indirect Ophthalmoscope		OMEGA 500	HEINE	A-OPD-0128	Ophtha.	17-May-16	17-Nov-16
229	Refractor	27888	RT 600	NIDEK	A-OPD-0128	Ophtha.	17-May-16	17-Nov-16

230	CORNEAL TOPOGRAPHY	2120563	CM01	CSO	A-OPD-0128	Ophtha.	17-May-16	17-Nov-16
231	Ophthalmic Examination Unit		OLD	FRATERMA	A-OPD-0126	Ophtha.	17-May-16	17-Nov-16
232	Refractor	23390	RT 600	NIDEK	A-OPD-0126	Ophtha.	17-May-16	17-Nov-16
233	Slit Lamp		SL-450	NIDEK	A-OPD-0126	Ophtha.	17-May-16	17-Nov-16
234	OPHTALMOMETER		OLD	NIDEK	A-OPD-0126	Ophtha.	17-May-16	17-Nov-16
235	Chart Projector	79131-3	CP30	TAKAGI	A-OPD-0126	Ophtha.	17-May-16	17-Nov-16
236	AUTO REFRACTOMETER	11462	ARK-700	nidek	A-OPD-0126	Ophtha.	17-May-16	17-Nov-16
237	LENSEOMETER	504664	LM-600 P	NIDEK	A-OPD-0126	Ophtha.	17-May-16	17-Nov-16
238	ANTERIOR SEGMENT IMAGING O4297		1000	VISTANTE	A-OPD-0039	Ophtha.	17-May-16	17-Nov-16
239	CEM MICROSCOPE	140179	530	NIDEK	A-OPD-0039	Ophtha.	17-May-16	17-Nov-16
240	SEM MICROSCOPE	CS4597	SEM	NIDEK	A-OPD-0039	Ophtha.	17-May-16	17-Nov-16
241	OPD	440006	SCAN II	NIDEK	A-OPD-0040	Ophtha.	17-May-16	17-Nov-16
242	CART PROJECTOR	70221		REICHERT	A-OPD-0040	Ophtha.	17-May-16	17-Nov-16
243	CART PROJECTOR	163108	CP 770		A-OPD-0040	Ophtha.	17-May-16	17-Nov-16
244	SLIT LAMP		900	HAAG STERIT	A-OPD-0040	Ophtha.	17-May-16	17-Nov-16
245	CONFESCAN	3016	3	NIDEK	A-OPD-0040	Ophtha.	17-May-16	17-Nov-16
246	Ophthalmic Examination Unit				A-OPD-0045	Ophtha.	17-May-16	17-Nov-16
247	LENSEOMETER	12721	LM990	NIDEK	A-OPD-0045	Ophtha.	17-May-16	17-Nov-16
248	Ophthalmic Examination Unit		DELTA	FRATEMA	A-OPD-0045	Ophtha.	17-May-16	17-Nov-16
249	SLIT LAMP		900	HAAG STERIT	A-OPD-0045	Ophtha.	17-May-16	17-Nov-16
250	REFRACTOR		RT 600	NIDEK	A-OPD-0045	Ophtha.	17-May-16	17-Nov-16
251	INDIRECT OPHTHALMOSCOPE		OMEGA 180	HEINE	A-OPD-0045	Ophtha.	17-May-16	17-Nov-16
252	CART PROJECTOR		CP30	TAKAGI	A-OPD-0045	Ophtha.	17-May-16	17-Nov-16
253	RS-3000	650076	3000	NIDEK	A-OPD-0044	Ophtha.	10-May-16	8-Nov-16
254	OPD SCAN	ARK 1000	10169	NIDEK	A-OPD-0044	Ophtha.	10-May-16	8-Nov-16
255	Ophthalmic Examination Unit			FRATEMA	A-OPD-0043	Ophtha.	17-May-16	17-Nov-16
256	SLIT LAMP	9002162822	SL-990	HAAG STREIT	A-OPD-0043	Ophtha.	17-May-16	17-Nov-16
257	INDIRECT OPHTHALMOSCOPE	21999	OMEGA 100	HEINE	A-OPD-0043	Ophtha.	17-May-16	17-Nov-16
258	CART PROJECTOR	240802	CP670	NIDEK	A-OPD-0043	Ophtha.	17-May-16	17-Nov-16
259	REFRACTOR	20986	RT 600	NIDEK	A-OPD-0043	Ophtha.	17-May-16	17-Nov-16
260	RETINOSCOPE	18200		HEINE	A-OPD-0043	Ophtha.	17-May-16	17-Nov-16
261	OPHTHALMOSCOPE	11720		HEINE	A-OPD-0043	Ophtha.	17-May-16	17-Nov-16
262	REFRACTOR		5100	NIDEK	A-OPD-016	Ophtha.	17-May-16	17-Nov-16
263	LENSEOMETER	501124		NIDEK	A-OPD-016	Ophtha.	17-May-16	17-Nov-16
264	ECOSCAN	10694	4000	NIDEK	A-OPD-018	Ophtha.	10-May-16	8-Nov-16
265	ECOSCAN	82767	US800	NIDEK	A-OPD-018	Ophtha.	10-May-16	8-Nov-16
266	OLD EXAMINATION CHAIR			FRATEMA	A-OPD-018	Ophtha.	17-May-16	17-Nov-16
267	MULTI COLOR WAVE	70193	7000	NIDEK	A-OPD-0015	Ophtha.	10-May-16	8-Nov-16
268	OCTUPOS	1191	101	INTERZEAG	A-OPD-0019	Ophtha.	17-May-16	17-Nov-16
269	LABADA RETINOSCOPE	100		HEINE	A-OPD-0019	Ophtha.	17-May-16	17-Nov-16
270	AUTO REFRACTOMETER	331093	ARK 510	NIDEK	A-OPD-0020	Ophtha.	10-May-16	8-Nov-16
271	CENTURION VISION SYSTEM	2014-07		CENTURION	RM.1	OR	22-May-16	24-Nov-16
272	CONSTELLATION	1403179601X	LXT	CONSTELLATION	RM.1	OR	15-May-16	13-Nov-16
273	Phoco Machine	0701176401X	INFINITI	INFINITI	RM.5	OR	22-May-16	13-Nov-16
274	ECOSCAN	82129	US 3300	NIDEK	HALL WAY	OR	10-May-16	8-Nov-16
275	VISION SYSTEM	1502965501X		CENTURION	HALL WAY	OR	15-May-16	13-Nov-16
276	CONSTELLATION	1502971501X	LXT	CONSTELLATION	HALL WAY	OR	15-May-16	13-Nov-16

277	TRABECTOME HIGHT FRQ. GENER	100243		TRABECTOME	HALL WAY	OR	22-May-16	13-Nov-16
278	LASER RETINA	1500331370IX		PUREPOINT	RM.2	OR	22-May-16	13-Nov-16
279	ACCURUS	990140505601X	VS 400	ALCON	HALL WAY	OR	15-May-16	13-Nov-16
280	ACCURUS	0102315601X	VS 400	ALCON	HALL WAY	OR	15-May-16	13-Nov-16
281	ACCURUS	9901968801X	VS 400	ALCON	HALL WAY	OR	15-May-16	13-Nov-16
282	Phaco Machine	0501689301X	INFINITI	ALCON	HALL WAY	OR	22-May-16	13-Nov-16
283	Diode Laser	33035	3300	Nidek	RM.3	OR	22-May-16	13-Nov-16
284	Diode Laser	30454	300	Nidek	RM.2	OR	22-May-16	13-Nov-16

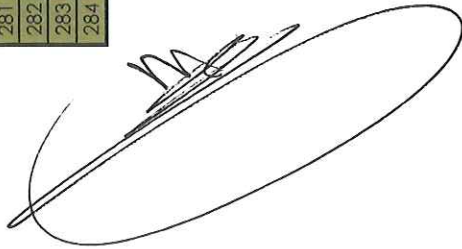


Table 4 - Constellation Data Sheet

Date:	System Configuration	Equipment	Calibration Number	Calibration Due Date
Customer:	Tray Arm 2.3.2.1	Scopemeter/Oscilloscope		
Service Request #:	Aux Illum 2.3.17.2 - 2.3.17.4	Digital Pressure Meter		
S/N:	CR3 Vit Tests 2.3.9.4.6 - 2.3.9.5.11	Power Meter or Photometer		
Software REL:	CR4 Vit Tests 2.3.10.5.13	Power Meter Head		
Performed by:	Autosert 2.3.20.11	Pressure Transducer Box		
	Laser 2.3.33.1	Flow Meter		

Check one of the following:

☐ Preventative Maintenance (Complete Section 2.2, then proceed to 2.3)

☐ Service Call / Installation / Upgrade (Start at Section 2.3)

2.2 PREVENTATIVE MAINTENANCE

2.2.2.1.2 ☐ Visual Inspection - Connectors, Cables, Tubing and Fan Filters

2.2.2.1.3 ☐ CPC connectors

2.2.2.2.1 ☐ Touchscreen Calibration

2.2.2.3.3 ☐ MP3

2.2.2.4.1 ☐ Battery Replacement

2.2.2.5.1 ☐ VGA Video System Connected?

Yes ☐ Complete.

2.2.2.5.2 ☐ VGA Output

2.2.2.6.1 ☐ VideoOverlay Connected?

Yes ☐ Complete.

2.2.2.6.3 ☐ Videooverlay displayed

2.2.2.7.1 ☐ DVD Recorder connected?

Yes ☐ Complete.

2.2.2.7.3 ☐ DVD Recorder

2.2.2.8.1 ☐ WIFI Connected?

Yes ☐ Complete.

2.2.2.8.1 ☐ WIFI Test

No ☐ Skip 2.2.2.5.2

No ☐ Skip 2.2.2.6.3

No ☐ Skip 2.2.2.7.3

No ☐ Skip 2.2.2.8.1

2.3 SERVICE CALL /INSTALL/ UPGRADE

2.3.1.1 ☐ Display & Arm range of travel

2.3.2.1 ☐ Tray arm range of travel

2.3.3.2 ☐ Pressure Source

2.3.4.1 ☐ System Bootup

2.3.5.1 ☐ Touchscreen/Tone/Voice

CR3 Vit Tests

2.3.9.4.6 7500 cpm Vit CORE Peak _____ psi

2.3.9.4.7 7500 cpm Vit CORE Valley - _____ psi

(-12.0 to -19.0)

2.3.9.5.10 5000 cpm Vit CORE Peak _____ psi

(11.0 to -19.0)

2.3.9.5.11 5000 cpm Vit CORE Valley - _____ psi

(-12.4 to -19.0)

2.3.10.5.13 ☐ CR4 Smartvit Verification -

Attach Smartvit Datasheet

2.3.11.4 Scissors _____ psi (48-52)

2.3.12.4 Forceps _____ psi (48-52)

2.3.13.4 VFC Inject _____ psi (77-83)

2.3.14.3 VFC Extract _____ mmHg (632-666)

2.3.15.2 ☐ Verify AGF tubing

2.3.15.5 AGF SF6 _____ psi (29.5 - 30.5)

2.3.15.8 AGF SF6 _____ psi (9.5 - 11.5)

2.3.15.11 AGF C3F8 _____ psi (29.5 - 30.5)

2.3.15.12 AGF C3F8 _____ psi (9.5 - 11.5)

2.3.16 Illumination Tabletop

2.3.16.2 Record Lamp Hours _____ Hrs

2.3.16.3 Port 1 _____ Lumens (10-22)

2.3.16.4 Port 2 _____ Lumens (10-22)

Diathermy Load _____ ohms (71 - 79 ohms)

2.3.18.2 Diathermy @ 100% _____ Vrms (24.6 to 29.9)

2.3.19.4 Diathermy Frequency _____ MHz (1.35 to 1.65)

2.3.19.5 Autosert steps complete without error

2.3.20.11 ☐ SD Write

2.3.21.4 ☐ SD Read

2.3.22.2 ☐ ALCON PERSONNEL ONLY: Uploaded Log.

2.3.22.3 ☐ Remote Control

2.3.23.1 ☐ Ring Illumination/RFID - Green and Amber

2.3.24.2 ☐ Ring Illumination - Lavender

2.3.24.3 ☐ Cassette Detection and ID

2.3.25.1 ☐ Bar Code Scanner

2.3.26.2 ☐ Successful Prime

2.3.27.2 ☐ Phaco 100% Power

2.3.28.1 Record Phaco Handpiece Serial Numbers

SN _____

SN _____

SN _____

2.3.29.4 ☐ Flow Test

2.3.30.3 Infusion _____ mmHg (112.6 - 127.0)

2.3.30.4 Backup Infusion _____ mmHg (18-42)

2.3.31.1 ☐ Backup Battery Test

2.3.32.1 ☐ Manual Cassette Release

2.3.33.1 ☐ Laser - Refer to Pure Point STP and Data Sheet

Revision

K

Drawing Number

917-2120-001

Title

STP, CONSTELLATION, MNL METHOD

Irvine, CA

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شركة الأمين لصيانة الأجهزة والمعدات الطبية
Al Amin Maintenance & Contracting Co. Ltd.

MAINTENANCE

2.3.17 Illumination AUX
2.3.17.2 Record Lamp Hours _____ Hrs
2.3.17.3 Port 3 _____ Lumens (10-22)
2.3.17.4 Port 4 _____ Lumens (10-22)

2.3.6.2 ☐ Footswitch Positions
2.3.6.4 ☐ Footswitch Proportional
2.3.7.6 Suction - _____ mmHg (632 to 668)
2.3.8.2 FAX _____ mmHg (112.6 - 127.0)

NOTES:

Title
STP, CONSTELLATION, MNL METHOD
Revision
K
Drawing Number
917-2120-001

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Irvine, CA

Customer: _____ Service Request No. _____
Model: Choose Model S/N: _____ Date Serviced: _____

NOTE: Throughout this checklist, fill in the requested data or indicate completed. Explain N/A's in notes section of this document.

Test Equipment	Equipment	Calibration Number	Calibration Due Date

Check one of the following: ☐ Preventative Maintenance or ☐ Service Call / Installation / Upgrade
(complete section 2.1, then proceed to 2.2) (start at section 2.2)

2.1. PREVENTATIVE MAINTENANCE CHECK

2.1.1 ☐ Inspect and clean front panel touchscreen.	2.1.12 ☐ Inspect CPC Connector
2.1.2 ☐ Inspect and clean internal console	2.1.13 ☐ Inspect Pneumatic Air and Moisture Filters
2.1.3 ☐ Check ground resistance	2.1.14 ☐ Replacement of CPU PCB Battery (p/n 190-022) ☐ Not due
2.1.4 ☐ Inspect system hardware	2.1.15 ☐ Replacement of 12 Volt Battery (p/n 190-020) ☐ Not due
2.1.5 ☐ Visually inspect all cables, connectors, PCB's, etc	2.1.16 ☐ Power Supply Voltages:
2.1.6 ☐ Check and tighten casters	Dual P.S. 5v = 5.1 to 5.25 _____
2.1.7 ☐ Check Fluidic Module Hub Rollers	Single P.S. 5v = 5.1 to 5.4 _____
2.1.8 ☐ Inspect Fluidic Module Solenoids	12v = 12.1 to 12.25 _____ 24v = 24 to 24.5 _____
2.1.9 ☐ Check Fluidic Module Vent Valve Linkage screw	2.1.17 ☐ VideOverlay Data Output Test (see step 2.2.15)
2.1.10 ☐ System Cooling	2.1.18 ☐ Replace system covers
2.1.11 ☐ IV Pole test	

2.2. SERVICE FUNCTIONAL TEST

2.2.1 Load Box Resistance					
Cautery Plugs 75Ω ± 4Ω	Adapter Cable 2.37K Ω to 2.62K Ω	Motor Output & Gnd M Out & Gnd 9.5Ω 1and 10.5Ω	Motor Output & Motor 1 M Out & M1 9.5Ω 1and 10.5Ω	Motor Output & Motor 2 M Out & M2 9.5Ω 1and 10.5Ω	Aqualase 23.0 Ω - 27.0Ω
_____ ohms	_____ Kohms	_____ ohms	_____ ohms	_____ ohms	_____ ohms

☐ Universal Load Box (P/N 210-3202-001) used during testing

2.2.2. FRONT PANEL & TRAY ARM TEST

2.2.2.1 DISPLAY

- 2.2.2.1.2 ☐ Verify display shows Setup screen
2.2.2.1.3 ☐ Check Display Arm range of motion
2.2.2.2 ☐ Check Tray Arm range of motion

2.2.2.3 TOUCH SCREEN/TONE/VOICE

- 2.2.2.3.3 ☐ Verify Touch Screen step changes.
2.2.2.3.4 ☐ Verify tone/voice responses

2.2.2.4. CONTROL BUTTONS

- 2.2.2.4.1 ☐ Verify settings adjustments, change Linear and Fixed

2.2.2.5 MULTIMEDIA CARD DRIVE

- 2.2.2.5.1 ☐ From System to Data Card
2.2.2.5.2 ☐ Delete Data from System
2.2.2.5.3 ☐ Restore from Data Card to System
2.2.2.5.4 ☐ Delete Data from Card
2.2.2.5.5 ☐ Delete Data from System

2.2.2.6 EVENT VIEWER AND LOG RETRIEVAL

- 2.2.2.6.2 ☐ List noted
2.2.2.6.4 ☐ Event Log Backed Up and Uploaded

2.2.3. REMOTE CONTROL TEST

- 2.2.3.3 ☐ Verify system changes between selected steps

2.2.3. FLUIDICS MODULE TEST

2.2.4.1 FMS AUTO LOAD

- 2.2.4.1.3 ☐ Verify FMS Latch Mechanism pulls/holds FMS
2.2.4.1.4. Record REL _____ from the About Screen

2.2.4.2 ASPIRATION SENSOR CALIBRATION

- 2.2.4.2.1. ☐ Verify FMS calibration passed

2.2.4.3 IRRIGATION FAILSAFE

- 2.2.4.3.4. ☐ Verify list of faults displayed

2.2.5. FOOTSWITCH TEST

- 2.2.5.1 ☐ Verify footswitch icon indicates position 0.
2.2.5.3.1 ☐ Observe change from position 0 to 1 and to 2.
2.2.5.3.2 ☐ Coag power increases from 0-100% as pedal depressed
2.2.5.4 ☐ No intermittent response: COAG Power or FTSW icon.
2.2.5.6 ☐ Verify footswitch detects vibration.
2.2.5.7 ☐ Verify footswitch vertical, horizontal, and treadle switches (left and right for each).

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Parent Document: ITC SOP-000637

Supersedes: S0637-01

2.2.6.1.6 Record measurements:

DPM	Irrigation Specification	IPS Reading on Display	Aspiration Specification	APS Reading on Display
+100 ± 1 mmHg	+135 ± 14 cmH ₂ O	+ cmH ₂ O	+100 ± 10 mmHg	+ mmHg
+50 ± 1 mmHg	+68 ± 7 cmH ₂ O	+ cmH ₂ O	+50 ± 10 mmHg	+ mmHg
0 ± 1 mmHg	0 ± 7 cmH ₂ O	cmH ₂ O	0 ± 10 mmHg	mmHg
-60 ± 1 mmHg	0 ± 7 cmH ₂ O	cmH ₂ O	-60 ± 10 mmHg	- mmHg
-200 ± 1 mmHg	0 ± 7 cmH ₂ O	cmH ₂ O	-200 ± 20 mmHg	- mmHg
-400 ± 1 mmHg	0 ± 7 cmH ₂ O	cmH ₂ O	-400 ± 40 mmHg	- mmHg
-600 ± 1 mmHg	0 ± 7 cmH ₂ O	cmH ₂ O	-600 ± 60 mmHg	- mmHg

2.2.6.2. FMS PRIME – WET TEST

2.2.6.2.4. ☐ Verify PRIME completes

2.2.6.3. OCCLUSION TEST

2.2.6.3.1. Measurements:

VACUUM LIMIT	ASPIRATION RATE	SPECIFICATION	Reading on Display
6	12	0 to -16 mmHg	- mmHg
26	15	-16 to -36 mmHg	- mmHg
65	25	-55 to -75 mmHg	- mmHg
400	40	-360 to -440 mmHg	- mmHg
600	60	-540 to -660 mmHg	- mmHg

2.2.6.3.1.3 ☐ Verify audible chime, pump stops, and OCCLUSION displayed during Occlusion

2.2.6.4. RESIDUAL PRESSURE 2.2.6.4.3 ☐ Three readings ≤ 15mmHg at 100mmHg 2.2.6.4.4 ☐ Three readings ≤ 15mmHg at 400mmHg 2.2.6.4.5 ☐ Three readings ≤ 15mmHg at 600mmHg 2.2.7. PNEUMATICS TEST- 800 CPM 2.2.7.1 Method: ☐ DPM /Scopometer ☐ N/A 2.2.7.1.4 (____ mVp) ≥ +231.84 mV at 50cpm 2.2.7.1.5 ☐ ≥ +231.84mV for each cut rate 100-800 2.2.7.2 Method: ☐ Probe Drive Test Box/Scopometer ☐ N/A 2.2.7.2.5 ☐ Peak output > 23psi (1.15Vpp or 2.3 div) 2.2.9. CAUTERY TEST 2.2.9.4 (____ MHz) Coag frequency (from 1.43 to 1.67 MHz) 2.2.9.5 (____ VRMS) Coag voltage at 100% (24.4 to 30.4 VRMS) 2.2.9.6 (____ VRMS) Coag voltage at 50% actual (17.4 to 21.4 VRMS) 2.2.9.7 (____ VRMS) Coag voltage at 25% actual (12.2 to 15.2 VRMS) 2.2.10 PHACO AND NEOSONIX DRIVE TEST ☐ Unable to use NeoSonix Loadbox, go to Step 2.2.11	2.2.6.5 ASPIRATION FLOW RATE – Indicate test method used to verify flow rates: ☐ FLOWMETER or ☐ BEAKER 2.2.6.5.1 (____ cc/min) FLOW RATE at 35cc/min (30-40cc/min) 2.2.6.5.2 (____ cc/min) FLOW RATE at 25cc/min (21-29cc/min) 2.2.8 PNEUMATICS TEST- ULTRAVIT- 2500 CPM Check here ☐ if N/A; system does not have Ultravit 2500 feature 2.2.8.2.8 VDC Min Peak Closed (____ mVp) ≥ 520 mv 2.2.8.2.9 VDC Min Peak Open (____ mVp) ≥ -480 mv (absolute value) 2.2.10.1. NEOSONIX DRIVE TEST – Top Connector 2.2.10.1.6.1. (____ VRMS) 1.785 to 3.775 VRMS 2.2.10.1.6.2. (____ %) 57% to 63% of Duty Cycle 2.2.10.3 PHACO DRIVE TEST – Bottom Connector 2.2.10.2.5.1 (____ VRMS) 4.62 to 6.93 VRMS, 4.85 to 7.28 (Univ Loadbox) 2.2.10.2.5.2 (____ kHz) 33.5 to 37.5kHz
2.2.11 CUSTOMER HANDPIECE CHECK: (perform these tests if customer will provide the use of their handpieces or unable to use Loadbox. Check here if handpieces not available ☐) 2.2.11.1 ☐ Customers handpiece(s) operated per procedure Record Customer Handpiece Serial Number(s) (Any additional Handpiece put in Notes Field): (T= Torsional/P=Phaco/N=NeoSonix): (S/N _____) T ☐ P ☐ N ☐ (S/N _____) T ☐ P ☐ N ☐	2.2.12 AQUALASE™ DRIVE AND PNEUMATIC TEST ☐ Unable to use Aqualase Load box, go to Step 2.2.13 2.2.12.1.3 ☐ Verify Setup screen states "Aqualase™ Test Tuned" 2.2.12.2. LOAD BOX USAGE 2.2.12.2.6 ☐ In Magnitude Linear, Limit 100, Pulse, 50pps and Burst Linear, Limit 100, press F/S to pos. 3: verify: MAGNITUDE varies 0 to 100, PULSE displays 50pps, BURST varies 0 to 100 2.2.12.2.7 ☐ ScopeMeter above 280vpp, DPM reading above 5psi
2.2.13 CUSTOMER AQUALASE™ HANDPIECE CHECK (perform these tests if customer will provide the use of their handpieces or unable to use Loadbox. Check here if handpieces not available ☐) Record Customer Handpiece Serial Number(s) (Any additional Handpiece put in Notes Field): (S/N _____) 2.2.13.2 AQUALASE™ HANDPIECE TUNING 2.2.13.2.2 ☐ Verify H/P passes tune displayed on LCD Display 2.2.13.3 AQUALASE™ HANDPIECE USAGE 2.2.13.3.4 ☐ Verify results from Procedure 2.2.13.3.8 ☐ Verify results from Procedure	2.2.14 Autosert IOL Motor ☐ Software version 3.0 or higher 2.2.14.8 ☐ Steps completed without error 2.2.15 WIRELESS FEATURE CHECK 2.2.15.2 ☐ N/A ☐ On and connected. 2.2.16. BATTERY BACKUP TEST 2.2.16.2 ☐ System closes Windows® and shuts down between 5 sec and 1 minute 2.2.17. VIDEO overlay DATA OUTPUT TEST Note: Installation or PM only, otherwise, ☐ N/A 2.2.17.11 ☐ Typed characters appear on display when Interface PCB and jumper are connected

Notes:

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Parent Document: ITCSOP-000637

Supersedes: S0637-01

CENTURION STP DATA SHEET

Customer: _____ Service Request No.: _____
S/N: _____ Date Serviced: March 9, 2015

NOTE: Throughout this data sheet fill in the requested data or explain any unchecked boxes or N/A's in the notes section at the end of the form

1.0 Test Equipment	Equipment	Calibration Number	Calibration Due Date
	Scopemeter		
	Pressure Meter		
	Pneumatics Transducer Test Box		

☐ Preventative Maintenance (Start at step 2.1) ☐ Installation, Repair, Upgrade and all other Service Activities (Start at step 3.0)

PREVENTATIVE MAINTENANCE

- 2.1 Power cord resistance
- | Expected Values | Meter Reading |
|-----------------|---------------|
| ≤0.5 Ohms | Ohms |
- 2.2 ☐ Display tilt and rotate operated correctly.
- 2.3 ☐ Tray arm operated correctly.
- 2.4 ☐ Work surface operated correctly.
- 2.5.1 ☐ Verified exhaust air flowed from vents.
- 2.5.2 ☐ Air filters are clean.
- 2.6 ☐ Manufactured date and serial number are entered in system correctly.
- 2.7 ☐ Cable wireless footswitch functioned correctly.
- 2.8 ☐ Make certain all four casters are tight.

FUNCTIONAL TESTS

- 3.0 ☐ No advisory of warning displayed following power up.
- 4.0 Record software version: Rel _____
- 5.0 ☐ Touchscreen responded appropriately.
- 6.0 ☐ Date and time are correctly set in console.
- 7.0 ☐ Tones and voice controls worked correctly.
- 8.0 ☐ Task light turned on and off.
- 9.0 ☐ IV pole functioned properly.
- 10.1 ☐ Footswitch has full treadle travel motion.
- Is tested footswitch a Centurion Wireless?
- ☐ YES, Complete step 10.2.
- ☐ NO, Skip to step 10.3.
- 10.2 ☐ A minimum of 4 pedal_up sensors are functioning.
- 10.3 ☐ All four side-switches are functioning properly.

- 11.0 ☐ Remote control functions properly.
- 12.0 ☐ Both PEL LED panels tracked properly.

13.1 Record transducer accuracy values:

Input mmHg	Expected mmHg	IPS Reading	APS Reading
+200	+180 to +220	+	+
0	+10 to -10		
		Include + or - sign above	
-100	-90 to -110	-	-
-400	-360 to -440	-	-
-600	-540 to -660	-	-
Record Meter Value (if unable to obtain -600 mmHg)		- if needed	

- 13.2 ☐ Cassette passed priming process.

Title

STP,CENTURION VISION SYSTEM

Irvine, CA

Drawing Number

917-2150-002

Revision

E

26 of 27

CENTURION STP DATA SHEET

Does system contain software 2.04 or higher?

☐ YES, Complete test table below.

☐ **NO, Skip to step 18.0.**

Infiniti Long. Freq.	33.5 – 37.5 KHz	KHz
Infiniti Long. Vrms	9.9 – 13.3 Vrms	Vrms
Infiniti Tors. Freq.	31.7 – 32.2 KHz	KHz
Infiniti Tors. Vrms	4.9 – 6.6 Vrms	Vrms

18.0 ☐ IOL Injector operated properly.

19.0 ☐ Event Log backed up successfully to a USB flash drive.

20.0 ☐ A spare Centurion wireless footswitch cable is present.

21.0 ☐ System successfully switched to battery backup when AC cord was disconnected.

16.0 Record Cautery frequency and voltages:

Frequency	1.35 to 1.65 MHz	MHz
100%	23.9 to 29.2	Vrms
50%	17.3 to 21.1	Vrms
25%	12.2 to 14.8	Vrms

17.0 Ultrasound Output Test

Top Long. Freq.	41.6 – 42.2 KHz	KHz
Top Long. Vrms	9.9 – 13.3 Vrms	Vrms
Mid. Tors. Freq.	31.7 – 32.2 KHz	KHz
Mid. Tors. Vrms	4.9 – 6.6 Vrms	Vrms

13.3 Record accumulated water level:

60	48 to 72cc in 1 min.	cc/min
25	20 to 30cc in 1 min.	cc/min

13.4 Record displayed bag pressure reading:

+120	+90 to +150 mmHg
+170	+140 to +200 mmHg

14.0 Record pneumatics cutter waveform calculated measurements:

VDC Bias	-30 to +60 mV	mV
Min Peak	≥ 475mV	mV
Max Peak [absolute value]	≥ 475mV	mV

15.0 Universal Load Box resistance verification:

Cautery Load	71.0 Ω to 79.0 Ω	Ω
Ozil Load	2.37K Ω to 2.62K Ω	K Ω

March 9, 2015

Date _____

Test Performed By (PRINT)

Notes:

Revision

III

Drawing Number

917-2150-002

Title
STP.CENTURION VISION SYSTEM

Irvine, CA

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PurePoint Laser Data Sheet

EQUIPMENT	SERIAL / CALIBRATION NUMBER	CALIBRATION DUE DATE
Power / Energy Meter		
Meter Head 1		
Meter Head 2		
Oscilloscope / Scopemeter		

Customer: _____
Service Request No.: _____
S/N: _____
☐ Console / Tethered ☐ Embedded Laser Module
(For Embedded Laser, check all boxes marked N/A **)

NOTE: Fill in the requested data or place a ✓ mark in the box. Any N/A's must be explained in the Notes section.
Check one of the following: ☐ Preventative Maintenance (Complete Section 2.1, then proceed to 2.2) ☐ Service Call / Installation / Upgrade (Start at Section 2.2)

2.1 PREVENTATIVE MAINTENANCE	2.1.1 ☐ Clean optics block components as required	2.1.4 ☐ LBO temperature optimization
	2.1.2 ☐ Clean faces of fiber optics as required	2.1.5 ☐ Photomonitor calibration
	2.1.3 ☐ Clean fans and TECs as needed	2.1.6 ☐ Check / set terminal fiber efficiencies Port 1/2

2.2 SERVICE FUNCTIONAL TEST

2.2.1 Slit Lamp Optical Check (Check here if not equipped ☐)	2.2.1.4 ☐ Free movement of magnification & filter knobs	2.2.1.8 ☐ Scope focus at all magnifications
2.2.1.1 ☐ Proper operation of illumination & fixation bulbs	2.2.1.5 ☐ Clean source/objective lens, mirror, & oculars	2.2.1.9 ☐ Check movement of manipulator
2.2.1.2 ☐ Free movement of joystick/chin rest/scope arm	2.2.1.6 ☐ Converge/Focus/Center of slits at focal point	2.2.1.10 ☐ Visually inspect slit lamp optical fiber
2.2.1.3 ☐ Proper operation of arm & source locking screw	2.2.1.7 ☐ Converge/Focus of laser spot at focal point	
2.2.2 LIO Optical Alignment (Check here if not equipped ☐)	2.2.2.2 ☐ Horizontal alignment of aiming beam centered with illumination spot, and range of vertical movement centered with illumination	
2.2.2.1 ☐ Illumination spot centered in field of view & proper size.	2.2.2.3 ☐ Visually inspect the LIO optical fiber and electrical cable for kink, cuts, or other damage	
2.2.3 Laser Console Check	2.2.3.6 ☐ Filter 1 lever - disengaged ☐ N/A-passive	2.2.3.12 ☐ Verify function aiming brightness knob ☐ N/A**
2.2.3.1 ☐ Inspect/replace air filter at bottom of unit.	2.2.3.7 ☐ Filter 2 lever - disengaged ☐ N/A or N/A-passive	2.2.3.13 ☐ Verify function interpulse knob ☐ N/A**
2.2.3.2 ☐ Verify Emergency Stop Switch shutdown	2.2.3.8 ☐ Verify RFID-Slit Lamp Ports 1/2 ☐ N/A**	2.2.3.14 ☐ Maximum brightness of aiming beam
2.2.3.3 ☐ Verify Remote Interlock removal prevents firing	2.2.3.9 ☐ Verify RFID-LIO fiber to Ports 1/2	2.2.3.15 ☐ Maximum brightness level of the LIO output
2.2.3.4 ☐ Footswitch removal displays message	2.2.3.10 ☐ Verify RFID-Endo to Ports 1/2	2.2.3.16 ☐ Record Shot Count
2.2.3.5 ☐ Filter message displayed on startup	2.2.3.11 ☐ No connection prevents firing Ports 1/2	2.2.3.17 ☐ Check tethered capability ☐ N/A

2.2.4 Energy Verification Measurement Method: ☐ Watts x Time ☐ Energy	2.2.4.3 Average Exposure Time at 10 mS (0.01 S) _____ mS (9.5 - 10.5)
2.2.4.4 Slit Lamp Power (Check here if not equipped ☐)	2.2.4.6 Endoprobe Power (Check here if not equipped ☐)
Port 1 Port 2	Port 1 Port 2
0.20 W $\frac{mJ}{(0.174 - 0.226)}$ E $\frac{mJ}{(1.64 - 2.36)}$	0.20 W $\frac{mJ}{(0.174 - 0.226)}$ E $\frac{mJ}{(1.64 - 2.36)}$
0.50 W $\frac{mJ}{(0.435 - 0.565)}$ E $\frac{mJ}{(4.1 - 5.9)}$	0.50 W $\frac{mJ}{(0.435 - 0.565)}$ E $\frac{mJ}{(4.1 - 5.9)}$
1.0 W $\frac{mJ}{(0.870 - 1.13)}$ E $\frac{mJ}{(8.2 - 11.8)}$	1.0 W $\frac{mJ}{(0.870 - 1.13)}$ E $\frac{mJ}{(8.2 - 11.8)}$

Performed by _____ Notes: _____
Date January 5, 2016

Form ITCDOC-001095, Version 8.0, Page 1 of 1

Parent Document: ITCOP-001059, Version 8.0

Supersedes: N/A

Customer _____ Service Request _____

Model/Platform _____ Choose Model -- _____ Choose Platform -- _____ S/N _____

NOTE: Throughout this Data Sheet either fill in the requested data or place a ✓ mark in the bracketed space, (_____).

Any N/A's must be explained in the notes section of this document.

Test Equipment:

EQUIPMENT	CALIBRATION NUMBER	CALIBRATION DUE DATE

Check one of the following: ☐ Preventive Maintenance or ☐ Service Call/Installation/Upgrade
(complete section 2.1, then proceed to 2.2) (start at section 2.2)

2.1 PREVENTIVE MAINTENANCE

2.1.1 CONSOLE INSPECTION

2.1.1.1 ☐ Tubing and Manifolds 2.1.1.2 ☐ Filter 2.1.1.3 ☐ CPC fittings

2.1.2 CART INSPECTION

Is there an Accurus Cart? ☐ No. Skip section 2.1.2 ☐ Yes. Complete section 2.1.2

2.1.2.1 ☐ Console Secured to Cart 2.1.2.2 ☐ Lower Compartment Door Opens & Closes

2.1.3 CPU BATTERY REPLACEMENT

2.1.3.1 ☐ CPU PCB battery replacement has been completed in less than two (2) years.

2.1.4 FRONT PANEL TOUCHSCREEN

2.1.4.2 ☐ Inspect and clean the front panel Touchscreen.

2.1.5 PRESSURE SOURCE TEST

2.1.5.3 ☐ No audible pressure leaks are present.

2.1.5.5 Is pressure source adjustable between 90-120 psi?

☐ No Go to section 2.1.6 ☐ Yes Continue

2.1.5.7 Record low pressure threshold + _____ psi (78 - 83)

2.1.6 SYSTEM COOLING

2.1.6.1 ☐ Verify Cooling Fan Operation.

2.1.7 ILLUMINATOR "BULB FAILURE"

2.1.7.4 ☐ Verify "Bulb Failure" Message.

2.1.7.6 ☐ Bulb is properly aligned.

2.2 SERVICE FUNCTIONAL TEST

2.2.1 LATCH SEAL REPLACEMENT / ACCURUS CONSOLE INSPECTION

2.2.1.2 ☐ Latch Seal

2.2.1.3 ☐ Hub Roller ☐ Footswitch ☐ Power Cord.

2.2.1.4 ☐ Connectors ☐ Receptacles ☐ Covers and panels

2.2.1.5 ☐ Fan Filter

2.2.2 SYSTEM POWER ON TEST

2.2.2.6 ☐ System successfully completed boot-up sequence.

2.2.2.7 ☐ Global arrows keys, Standby Switch and cassette eject are backlit.

2.2.3 SYSTEM REL & ERROR LOG

2.2.3.1 Record system software REL _____

2.2.3.2 XS4 PLATFORM ONLY ☐ Record any listed Error/Fault numbers 2.2.3.3 ☐ Clear error log.

2.2.4 DIATHERMY TEST

2.2.4.1 DIATHERMY LOAD VERIFICATION Cautery Test Load _____ ohm (75.0 +/- 4.0)

2.2.4.3 ☐ Audible tone when footpedal is pressed.

2.2.4.4 - 2.2.4.5 Measure and record the following:

MEASUREMENT	ACCEPTABLE RANGE	RECORD MEASURED VALUE
Frequency	323 - 357 KHz	KHz
Scope Amplitude	38.8 - 42.4 Vrms	Vrms

2.2.4.6 ☐ With Diathermy power set to 0, the amplitude is < 0.7 Vrms.

2.2.4.7 ☐ Diathermy linearity increases from 2.8 - 4.24 with each increment of 10.

2.2.4.8 Voltage Feedback Reading Vdc (3.96 - 4.04)

2.2.5 PRESSURE REGULATORS

2.2.5.1 Measure and record the following:

Location	Test Port	Acceptable Range	Record Measured Value
Press/Vac Manifold	TP1	82 – 93 Psi (5-Bar Pressure Select Is N/A)	+ psi
Press/Vac Manifold	TP2	27 – 33 Psi	+ psi
Press/Vac Manifold	TP3	54 – 60 Psi	+ psi

2.2.5.2 ☐ TP3 <62 psi with T2 clamped.

2.2.6 FOOTPEDAL TEST

2.2.6.1 ☐ Verify footpedal icon changes correspondingly to footpedal treadle and switches.

2.2.7 GLOBAL DEFAULTS AND KEY TEST

2.2.7.3 ☐ Verify Global Display Default Values

2.2.8 CASSETTE INSERT EJECT

2.2.8.1 ☐ Verify Cassette Loading Sequence

2.2.8.2 ☐ Verify Cassette Unloading Sequence

2.2.9 TOUCH SCREEN TEST

2.2.9.2 ☐ Verify Touchscreen icons and handpiece LEDs function.

2.2.10 EXTRUDE (VACUUM) MODE TEST

2.2.10.3 Measure and record the following:

MAX LIMIT PRESET	ACCEPTABLE RANGE	RECORD MEASURED VALUE
200	191 – 209	- mmHg
400	387 – 413	- mmHg
600	583 – 617 (5-BAR Pressure select is N/A)	- mmHg

2.2.11 REFLUX TEST

2.2.11.1 ☐ Verify aspiration #2 Reflux pincher, hammer sequence.

2.2.11.2 ☐ Verify aspiration #1 Reflux pincher, hammer sequence.

2.2.12 FLUID LEVEL SENSOR TEST

2.2.12.3 ☐ Verify Sensor Operation as stated in Table 3.

2.2.13 CASSETTE SENSOR RECOGNITION - MODEL 800CS ONLY

2.2.13.3 ☐ Using the sensor test tool, verify cassette sensor recognition.

2.2.14 VGFI TEST 2.2.14.2 Measure and record the following:

VGFI PRESET	ACCEPTABLE RANGE	RECORD MEASURED VALUE
022	18 – 26	+ mmHg
070	65 – 75	+ mmHg
120	113 – 127	+ mmHg

2.2.14.3 ☐ Verify Actual Display Stability.

2.2.25.2 ☐ Verify that Phaco Handpiece tunes

Record Handpiece s/n _____ Is this a customer handpiece? ☐ No ☐ Yes

Record Handpiece s/n _____ Is this a customer handpiece? ☐ No ☐ Yes

Record Handpiece s/n _____ Is this a customer handpiece? ☐ No ☐ Yes

2.2.25.4 ☐ Verify that detents 1 and 2 are felt.

2.2.25.5 ☐ Verify that U/S power is linear while in footswitch position 3.

2.2.25.7 ☐ Verify pulsed U/S power and linear vacuum.

2.2.25.8 ☐ Verify that U/S pulse rate varies from 1 to 15 pps.

2.2.26 ACCURUS CART VISUAL INSPECTION (if applicable)

Is there an Accurus Cart? ☐ No. STP is Completed ☐ Yes Complete Section 2.2.26

2.2.26.1 ☐ Casters 2.2.26.2 ☐ Cables 2.2.26.3 ☐ Drawers

2.2.26.4 ☐ Mayo Tray 2.2.26.5 ☐ VGF/AVGFI Pole 2.2.26.6 ☐ Writing Tablet

2.2.26.7 ☐ Cable Cleats

Does the Accurus Cart have a Manual IV Pole?

☐ Yes. STP is Completed ☐ No. Continue to step 2.2.27

2.2.27 ACCURUS CART FUNCTIONAL TESTS

2.2.27.1 ☐ Check here if ceiling height prohibits maximum of 115 cmH₂O. Record Max allowed.

I/V Pole Max (113 to 117) _____ cmH₂O. I/V Pole Min (5 to 9) _____ cmH₂O

2.2.28 ACCURUS CART REMOTE CONTROL VERIFICATION

Does the Accurus® have a remote control? ☐ No. STP Complete ☐ Yes. Complete section 2.2.28

2.2.28.1 ☐ Verify Remote Control raises and lowers I/V Pole.

January 5, 2016

Performed By (PRINT) _____

Date _____

Was system tested using 5-BAR pressure selection? ☐ No ☐ Yes – N/A listed for all pressures above 70psi and vacuums exceeding 450 mmHg.

Notes: _____

Equipment **ARK SERIES Check list**

Date	
Location	
Service Engineer	
Customer	
ARK SERIES	
Accessory1	

☐ First PPM
☐ Second PPM

Special Tools Needed	Calibration Date
Calibration Kit	
Methanol	
Special Clining Paper	

☐ Focusing of Target reticle (circle)
☐ Characters on the T.V monitor
☐ Smooth horizontal movement of main body
☐ Clean the lenses
☐ Test real eye
☐ Chin Rest vertical Smooth movement
☐ Check PD Sensor
☐ Check button Fonction

Remark

Customer Name:	
----------------	--

Customer/ Dr. Signature :	
---------------------------	--

Room#

Examination unit Check List

Customer	Magrabi Hospital - K3
Main body	S/N
Slit lamp	S/N

Date :
Location : Jeddah - K3
Service Engineer :

☐	First PPM
☐	Second PPM

Special Tools Needed
Special Cleaning Paper
Methanol

- ☐ Checking Indirect Bulb
- ☐ Attaching a pad of the chin rest
- ☐ Checking the fuses
- ☐ Checking the illumination
- ☐ Cleaning outer parts
- ☐ Cleaning the optics
- ☐ Checking the chair movement
- ☐ Checking the head light
- ☐ Checking the chart projector illumination
- ☐ Checking the phoropter
- ☐ Checking the table movement

Remarks

Equipment	MC500 VIXI Check list
Date	
Location	
Service Engineer	
Customer	
Slit lamp	
Accessory1	
Accessory2	

☐ First PPM
☐ Second PPM

Special Tools Needed	Calibration Date
Power meter	
Methanol	
Special Clining Paper	

Power Data

Color	Power indicator	Spot size	
		50µm	500µm
GREEN,YELLOW,RED	50 mw		
	100 mw		
	200 mw		
	500 mw		
	900 mw		
	1000 mw		

☐ Checking the fiber alignment
☐ Checking the indicated spot size
☐ Checking the protective filter
☐ Checking the laser output
☐ Cleaning the optics
☐ Checking the output and Current of LH RED -----A Green -----A Yellow -----A
☐ Checking the power source

Remark

Customer Name:	
Customer/ Dr. Signature :	

Equipment	US SERIES Check list
Date	
Location	
Service Engineer	
Customer	
US SERIES	
Accessory1	

☐ First PPM
☐ Second PPM

Special Tools Needed	Calibration Date
Packy Crystal	
Phantom Crystal	

☐ Measure the A Probe reading by phantom crystal / /
☐ Gain control knob Rotation
☐ Check B probe & cable
☐ Check freezing in A&B-mode
☐ Test real and Celicon eye
☐ Check footswitch
☐ Checking noise in B mode
☐ Checking the power source
☐ checking the Pachy Probe Reading by Crystal / /
☐ Check button Fonction

Remark

Customer Name:	
Customer/ Dr. Signature :	

Avedro KXL PPM CHECK LIST

Customer	
Main body	S/N:

Date	
Location	
Service Engineer	

- ☐ Check Movement
- ☐ Alignment the beam
- ☐ Calibration the UV /
- ☐ Clean front lens
- ☐ Check Adapter output /
- ☐ Check Settings

Remarks

DC-3000/3300 PPM CHECK LIST

Customer	
DC-3000/3300 main body	S/N:
ENDO PROBE	S/N
Accessory1	S/N
Accessory2	S/N

Date	
Location	
Service Engineer	

Power Data

Color	Power indicator	Spot size
IR		MAX
	50 mw	
	100 mw	
	200 mw	
	500 mw	

- ☐ Checking the fiber alignment
- ☐ Checking the indicated spot size
- ☐ Checking the protective filter
- ☐ Checking the laser output
- ☐ Cleaning the optics
- ☐ Checking the output and volatage of LH
- ☐ Checking the power source

Remarks

MC-7000 PPM CHECK LIST

Customer	Magrabi Hospital
MC-7000 main body	
Slit lamp	S/N
Accessory1	S/N
Accessory2	S/N

Date	
Location	
Service Engineer	

spot size : 500µm

Power Data				
Color	Power indicator	Power Meter		
GREEN,YELLOW,RED		RED	YEL	GYN
	50 mw			
	100 mw			
	200 mw			
	500 mw			
	900 mw			
	1000 mw			

- ☐ Checking the fiber alignment
- ☐ Checking the indicated spot size
- ☐ Checking the protective filter
- ☐ Checking the laser output
- ☐ Cleanning the optics
- ☐ Checking the output and volatage of LH
- ☐ Checking the power source
- ☐ Checking the water level
- ☐ Checking the footswitch

Remarks

ORA-Reichert Checklist

Customer	
Main body	SN:

Date:
Location:
Service Engineer:

Remarks	☐	Wipe the Infrared Sensors
	☐	Check Fuses
	☐	Check Air Puff function
	☐	Cleaning outer parts
	☐	Head rest movement check
	☐	Side recognition sensor check
	☐	Check waveform signals
	☐	Check Serial communication
	☐	Check parking function

RS-3000 Check list

Customer	
Main body	S/N

Date:
Location :
Service Engineer:

Power Data

- ☐ Checking the power & fuses
- ☐ Checking up down joystick
- ☐ Cleaning outer parts
- ☐ Cleanning the optics
- ☐ Checking the computer hard disk capacity
- ☐ Make backup for Database
- ☐ Checking the Camera settings
- ☐ Checking the SpectroMeter unit
- ☐ Checking the table movment

Remarks

PM Check List NIDEK CEM Specular Microscope

Equipment:

Customer / Location:

Model :

S/N:

Pass

Fail

1. Focusing of Target reticle (circle)
2. Characters on the T.V monitor
3. Smooth horizontal movement of main body
4. Clean the lenses
5. Test real eye
6. Proper measurement of spectrometer
7. Chin Rest vertical Smooth movement
8. Cleaning of optics.

☐☐☐☐☐☐

9

☐☐☐☐☐☐

Unit meets all specifications and suitable for its intended use. ☐ Yes ☐ No

Test performed by _____

Signature _____

Date:

Notes:

Scanning Endothelial Microscope SEM Check list
Confocal Endothelial Microscope

Customer	
Main body	S/N:

Date:
Location :
Service Engineer:

- ☐ Checking the power & fuses
- ☐ Checking up down joystick
- ☐ Cleaning outer parts
- ☐ Cleanning the optics
- ☐ Checking the computer hard disk capacity
- ☐ Make backup for Database
- ☐ Checking the table movment
- ☐ Checking the software v

Remarks

Trabectome PPM CHECK LIST

Customer	
Main body	S/N:

Date	
Location	
Service Engineer	

- ☐ Check Movement
☐ Clean the Unit and Dry it
☐ Check Reading and U/S
☐ Check Errors and Settings
☐ Check Power

Remarks

CERTIFICATE OF AUDIOMETER CALIBRATION

Grason-Stadler
7625 Golden Triangle Drive
Eden Prairie, MN 55344

gsi
Grasson-Stadler

Owner	Model	Station	Date	Serial Number	Software Version
-------	-------	---------	------	---------------	------------------

[illegible]

Test	Pass	Fail
Distortion		
Rise / Fall Time		
Sound from Second Earphone		
Monitor Phone		
Talk Back Microphone		
Talk Forward Microphone		
Patient Response		
Patient Comfort		

Remarks

L	A.C Phones	Insert Phones
R		
	Bone Vibrator	

CALIBRATED PER ANSI S3.6-2004, IEC 645

F1236 Rev A

CERTIFICATE OF CALIBRATION - TYMPSTAR V2

Owner: _____ Serial Number: _____

Model: _____

Probe S/N: _____

Contra Phone S/N: _____

STIMULUS CALIBRATION			
MEASURED	SPL ERROR		CONTRA CH
	IPSI CH	CONTRA CH	IPSI CH
NORMAL			
250			
500			
1000			
2000			
4000			
6000			
LBN			
HBN			
BBN			
CLICK/PK			

PROBE TONE			
FREQUENCY		THD	
NORMAL	MEASURED	NORMAL	MEASURED
226 Hz	85 dB	<2%	
678 Hz	85 dB	<2%	
1000 Hz	85 dB	<2%	
1500 Hz	85 dB	<2%	

Test	Pass	Fail
Distortion		
Rise / Fall Time		
Sound from Second Earphone		
Pressure Overshoot		
Pressure Leak Rate		
Safety Valve Test		
Multi Frequency Immittance Test		
On/Off Ratio		

ATTENUATOR ERROR	
120	
115	
110	
105	
100	
95	
90	
85	
80	
75	
70	REF
65	
60	
55	
50	
45	
40	
35	

VOLUME CALIBRATION			
NORMAL	226 Hz	678 Hz	1000 Hz
0.2			
0.5			
1.0			
2.0			
5.0			
6.0			

PRESSURE CALIBRATION					
NOMINAL	400	200	100	0	-100
MEASURED					

Firmware Version

Station

Technician

Date

Grason-Stadler
7625 Golden Triangle Drive
Eden Prairie, MN 55344

gsi
Grason-Stadler

CALIBRATED PER ANSI S3.6-1996, S3.39-1987

F1221 Rev B

Equipment	ABR
Date	
Location	
Service Engineer	
Customer	
SN	
Accessory1	
Accessory2	

	First PPM
	Second PPM

[illegible]

☐	Checking Unit power On/Off
☐	Checking the software
☐	Checking calibration
☐	Check headphone
☐	Check headphone
☐	Checking Electrodes cables

Remark _____

Customer Name:	
----------------	--

Customer/ Dr. Signature :	
---------------------------	--

Equipment	<i>Moller weddal</i>
Date	
Location	
Service Engineer	
Customer	
SN	
Accessory1	
Accessory2	

	First PPM
	Second PPM

[illegible]

☐	Checking Unit power On/Off
☐	Light source checked
☐	Checking the fuses
☐	Checking the main device
☐	Checking the fiber optic
☐	Checking Microscope body

Remark _____

Customer Name:	
----------------	--

Customer/ Dr. Signature :	
---------------------------	--

Equipment	Relaince
Date	
Location	
Service Engineer	
Customer	
SN	
Accessory1	
Accessory2	

☐ First PPM
☐ Second PPM

Special Tools Needed	Calibration Date

☐ Checking Unit power On/Off
☐ checking pumps
☐ Checking the fuses
☐ Check suction

Remark _____

Customer Name: _____

Customer/ Dr. Signature : _____

CERTIFICATE OF CALIBRATION - TYMPSTAR V2

Owner: _____ Serial Number: _____

Model: _____

Contra Phone S/N: _____ Probe S/N: _____

ATTENUATOR ERROR		PROBE TONE				THD	
FREQUENCY	MEASURED	NORMAL	MEASURED	NORMAL	MEASURED	NORMAL	MEASURED
120							
115							
110							
105							
100							
95							
90							
85							
80							
75							
70							
65							
60							
55							
50							
45							
40							
35							

Test	Pass	Fail
Distortion		
Rise / Fall Time		
Sound from Second Earphone		
Pressure Overshoot		
Pressure Leak Rate		
Safety Valve Test		
Multi Frequency Immittance Test		
On/Off Ratio		

PRESSURE CALIBRATION					
NOMINAL	400	200	100	0	-100
MEASURED					

Date _____ Technician _____ Station _____ Firmware Version _____

CALIBRATED PER ANSI S3.6-1996, S3.39-1987

F1221 Rev B

Grason-Stadler
7625 Golden Triangle Drive
Eden Prairie, MN 55344

